

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of tracking a broadcast program, comprising:

~~registering the program by adding a registration number to the program; broadcasting the program; and~~

~~detecting a broadcast signal containing the broadcast program and recording the registration number from the broadcast signal program.~~

2. (Original) A method of tracking a broadcast program, comprising:

inserting a unique watermark value into a program to be broadcast;

deriving a fingerprint value based on said program's content;

storing said program's watermark value and associated fingerprint value;

detecting any watermark value inserted in a given broadcast program;

deriving a fingerprint value based on said given broadcast program's content;

and comparing any detected watermark value and derived fingerprint value from said given broadcast program with said stored watermark and associated fingerprint values.

3. (Original) The method of claim 2, wherein said unique watermark value is written into the user bits of said program's SMPTE time code.

4. (Currently amended) The method of claim 2, wherein:

said program to be broadcast has an associated embedded audio data stream; and

said unique watermark is encoded into the bits of said program's embedded audio data stream.

5. (Currently amended) The method of claim 2, further comprising:

creating a database in which the unique watermarks and their associated derived fingerprint values for a plurality of unique programs to be broadcast are stored; and

registering the unique watermark and associated derived fingerprint value for said program to be broadcast in said database;

comparing said watermark detected in said given broadcast program with the watermarks stored in said database; and

when said database contains a stored watermark which matches said detected watermark, cross-checking said fingerprint value derived from said given broadcast program with the stored fingerprint value associated with said detected-stored watermark.

6. (Currently amended) The method of claim 5, further comprising reporting the results of said cross-checking to the-a registrant of said program to be broadcast.

7. (Currently amended) The method of claim 5, further comprising comparing said fingerprint value derived from said given broadcast program with all said stored fingerprint values when said fingerprint value derived from said given broadcast program is different than said stored fingerprint value associated with said detected-stored watermark.

8. (New) The method of claim 1, further comprising:

registering the program with a registration database according to its registration number.

9. (New) The method of claim 8, further comprising:

comparing the recorded registration number from the broadcast signal with registration numbers stored in said registration database;

forwarding a notification to at least one of a registrant of the program or an owner of the program in the event that said recorded registration number matches a stored registration number.

10. (New) A method for enabling reliable identification of a content comprising:
 - embedding a watermark value into said content to produce an embedded content;
 - generating a fingerprint associated with said content;
 - registering information comprising said watermark value and said fingerprint, wherein said information can be subsequently used to identify said content.
11. (New) The method of claim 10, wherein said fingerprint is generated by analyzing inherent characteristics of the content.
12. (New) The method of claim 11, wherein said inherent characteristics comprise at least one of luminance, chroma, gamma, or amplitude levels of the content.
13. (New) The method of claim 10, wherein said fingerprint is generated for at least portions of an audio or video component of said signal.
14. (New) The method of claim 10, wherein said watermark value is embedded in at least portions of an audio or video component of said content.
15. (New) The method of claim 10, wherein said watermark value is inserted into an auxiliary information area of said content.
16. (New) The method of claim 15, wherein said auxiliary information area is reserved for an SMPTE time code.
17. (New) The method of claim 10, wherein said registering comprises:
 - receiving information comprising at least said watermark value and said fingerprint at a registration authority; and

verifying the received information.

18. (New) The method of claim 17, wherein said verifying comprises comparing at least one of said watermark value or said fingerprint against a database of registered watermark values and fingerprints.

19. (New) The method of claim 18, wherein said registering is completed when said comparing produces no matches.

20. (New) The method of claim 18, wherein said registering is not completed when said comparing produces at least one match.

21. (New) The method of claim 20, further comprising notifying at least one of an applicant or a content owner.

22. (New) The method of claim 18, wherein, said registering is partially completed when said comparing produces at least one match.

23. (New) The method of claim 22, further comprising:

contacting at least one of an applicant for registration or a content owner; and
updating said database in accordance with the response(s) of said applicant or said content owner.

24. (New) The method of claim 17, further comprising receiving additional content identification information.

25. (New) The method of claim 24, wherein said additional content identification information comprises at least one of content title, ownership information, or origination information.

26. (New) The method of claim 24, further comprising:

comparing at least one of said watermark value, said fingerprint or said additional content information against a database of registered watermark values, fingerprints and additional content identification information.

27. (New) The method of claim 26, wherein said registering is completed when said comparing produces no matches.

28. (New) The method of claim 26, wherein said registering is not completed when said comparing produces at least one match.

29. (New) The method of claim 28, further comprising notifying at least one of an applicant for registration or a content owner.

30. (New) The method of claim 26, wherein said registering is partially completed when said comparing produces at least one match.

31. (New) The method of claim 30, further comprising:

contacting at least one of an applicant for registration or a content owner; and
updating said database in accordance with the response(s) of said applicant or said content owner

32. (New) A method for enabling identification of a received content comprising:

generating a fingerprint associated with said received content;
analyzing said received content to discern the presence of embedded watermarks; and
identifying said received content utilizing at least one of said fingerprint and said analyzing.

33. (New) The method of claim 32, wherein said identifying is based on additional information stored in a registration database.

34. (New) The method of claim 32, wherein:

no watermarks are detected as a result of said analyzing;

said identifying comprises comparing said fingerprint with a database of registered fingerprints; and

if a match is discovered, reporting the reception of a registered content.

35. (New) The method of claim 32, wherein:

no watermarks are detected as a result of said analyzing;

said identifying comprises comparing said fingerprint with a database of registered fingerprints; and

if no matches are discovered, reporting the reception of an unregistered content.

36. (New) The method of claim 32, wherein:

at least one watermark is detected as a result of said analyzing; and

the detected watermark and said fingerprint are combined to uniquely identify said received content.

37. (New) The method of claim 32, wherein:

at least one watermark value is detected as a result of said analyzing;

said identifying comprises comparing the detected watermark value with a database of registered watermark values; and

if the detected watermark value matches a registered watermark value from the database, said fingerprint is compared with a database of registered fingerprints; and

if the fingerprint matches a registered fingerprint from the database, a first identification information associated with said stored watermark value is compared with a second identification information associated with said fingerprint to assess the status of said received content.

38. (New) The method of claim 37, wherein an agreement between said first and second identification information indicates the reception of a properly registered content.

39. (New) The method of claim 37, wherein a report is issued in the event of a conflict between said first and second identification information.

40. (New) The method of claim 37, wherein a conflict between said first and second identification information indicates the reception of an improperly registered content or an altered content.

41. (New) The method of claim 37, wherein said detected watermark value is used to facilitate the fingerprint search within said database.

42. (New) The method of claim 32, wherein cryptographic techniques are employed to ensure secure communications with said database.